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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,898	12/08/2003	Hiroshi Ishikawa	040302-0361	9294

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EXAMINER	
TSOY, ELENA	
ART UNIT	PAPER NUMBER
1792	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/728,898	ISHIKAWA ET AL.	
	Examiner	Art Unit	
	Elena Tsoy	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 5-9* is/are pending in the application.

4a) Of the above claim(s) *7 and 8* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,6 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 24, 2008 has been entered.

Response to Amendment

Amendment filed on December 26, 2007 has been entered. Claims 1, 5-9 are pending in the application. Claims 7-8 are withdrawn from consideration as directed to a non-elected invention.

The Examiner Note

Since Applicants described nowhere meaning of L value in CIE colorimetric system, for examining purposes L value was interpreted as Hunter color values "L", "a", and "b" which can be measured with a HunterLab Spectrocolorimeter. The "L" value is a measure of lightness versus darkness or clearness versus cloudiness, higher values having greater lightness or clearness. The "a" and "b" values are measures of color. Positive "a" values indicate redness, and negative "a" values indicate greenness. Positive "b" values indicate yellowness and negative "b" values indicate blueness.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 5, 6, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites thickness of various layers in microns. However, it is not clear whether it is wet thickness or dry one. For examining purposes the "thickness" was interpreted according to the specification (See Example 1) as thickness before curing, i.e. as "wet" thickness.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panush (EP 0148718 A2) in view of Dattilo (US 6,291,018).

Panush discloses a method for coating metal and plastic substrates (See page 4, line 17), comprising: coating a colored primer paint on the plastic substrate; coating at least one color base paint containing a color pigment and/or effect pigment (See page 27, lines 13-32; page 8, lines 1-18) on the primer paint; and coating a color tinted *clear* coat on the base paint (See page 5, lines 23-27; page 33, lines 1-23). The color tinted *clear* coat provides an UV screener, which provides a medium through which one can *reduce* the pigment concentration of the base coat color (See page 5, lines 23-27).

As to a black plastic substrate, It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a method of Panush for plastic substrates of any color including black substrates with the expectation of providing the desired absolute hiding because Panush does not limit his teaching to any particular substrate color, and the method provides absolute hiding of any metal and plastic substrate. Note that metal has generally dark grey color.

As to L value of at least 80, Panush teaches that the primer contains specific pigments (See page 5, lines 32-33) such as *isoindolinone* yellow pigment (See page 14, line 1) at *controlled* levels (i.e. controlled L values) and has *good hiding* (See page 6, line 1).

As to claimed amount of pigment in the primer and claimed thickness of the primer, Panush discloses that the clear and base coats *prevent the UV rays from reaching the primer*; the primer provides the primary hiding and the base color for less-than-hiding base coat (See page 6, lines 15-16). Panush discloses that the colored primer/basecoat/clear coat system may be made to provide *absolute* substrate hiding (See page 31, lines 1-32). Panush discloses that the amount of pigment blended with the base coat within 1-20 wt % (See page 3, lines 11-12). Depending on the type of the primer, film builds can vary; some examples include film builds (*wet* thickness) of 0.7-1.2 mils (See page 19, lines 19-22). The base coat is typically applied from 0.4 mil (10μ) to **2.0 mil** (51 μ) (*wet*) thickness (See page 19, lines 25-27). Panush discloses that the primer layer contains pigment in an amount **less** than that present in the base coat, *the pigment being the same, complimentary to or divergent from the color imparted by the pigment in the base coat* (claimed first and second color pigment) (See page 3, lines 22-28), the primer layer should

contain pigment in an amount **less** than 1-20 wt %. In other words, the primer layer of Panush may contain the pigment in an amount ***as little as*** "less than 1 wt %", as required by Claim 1.

Since Panush teaches that both the clear and base coats *prevent the UV rays from reaching the primer,* and the primer layer contains pigment in an amount **less** than that present in the base coat, obviously the absolute hiding can be reached with the primer containing a pigment in an amount less than 1 wt % and thickness of the primer less than that of the base coat by selecting pigments of various opacity in each of primer, base coat and clear coat layers, and by varying the thickness and an amount of the pigment in each of the base coat and clear coat layers. Note that the thickness of the primer could be less than that of a base coat depending on level of opacity of the pigment.

As to claimed thickness of the base coat, Panush teaches that *less-than-hiding* base coat may be applied from 0.4 mil (10μ) to **2.0 mil** (51μ) (*wet*) thickness (See page 19, lines 25-27). Therefore, the hiding power of the base coat is more than 10-51μ, which overlaps claimed hiding power of 30μ or more. Overlapping ranges are *prima facie* evidence of obviousness. It would have been obvious to one having ordinary skill in the art to have selected the portion of Panush's range that corresponds to the claimed range. *In re Malagari*, 184 USPQ 549 (CCPA 1974).

As to claimed particular ranges, it is held that it is not inventive to discover the optimum or workable ranges of result-effective variables by routine experimentation. In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). See also In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the optimum concentration parameters of a pigment in a primer, i.e. optimum L values, and optimum thickness of the primer (including

those of claimed invention) in Panush through routine experimentation in the absence of showing of criticality depending on particular opacity of the pigment, substrate color, etc.

Panush does not expressly teach that at least one color base coat is applied as a first solid color layer and a second layer containing effect pigment.

Dattilo teaches that applying effect pigment-containing second basecoat layer over the first basecoat layer after flashing first basecoat material containing solid pigments provides polychromatic effect (See column 9, lines 3-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied first a solid color base coat, then after short flash a second effect pigment containing base coat with the expectation of providing the desired polychromatic effect, as taught by Dattilo.

As to claim 9, it is held that concentration limitations are obvious absent a showing of criticality. Akzo v. E.I. du Pont de Nemours 1 USPQ 2d 1704 (Fed. Cir. 1987). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the optimum values of the relevant concentration parameters of pigments in a primer and in a basecoat and optimum values of thickness of coatings (including those of claimed invention) in the cited prior art through routine experimentation in the absence of showing of criticality depending on particular required final tone of a composite film.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Panush in view of Dattilo, further in view of Jackson et al (US 5962574) for the reasons of record set forth in paragraph 6 of the Office Action mailed on 5/11/2007.

Response to Arguments

6. Applicants' arguments filed December 26, 2007 have been fully considered but they are not persuasive.

(A) Applicants argue that a prima facie case of obviousness has not been established since three basic criteria were not met. Here, Panush, Dattilo, and Jackson, whether taken individually or in combination, fail to teach or suggest a method "wherein the primer paint comprises the second color pigment which is present in an amount ranging from an amount equal to or more than 0.03 wt% to an amount less than 1 wt% relative to a solid content of the primer paint" as recited in independent claim 1.

The Examiner respectfully disagrees with this argument for the reasons discussed above.

(B) Applicants assert that as discussed in the present specification at page 5, lines 5-7, "if the content of the color pigment [contained in the primer paint] exceeds 1 wt%, ill effects are incurred to the adhesiveness and the weather resistance of the primer coating film." (Emphasis and bracketed text added).

However, Applicants' assertion is a pure allegation. The specification provides NO *experimental* data showing the "ill effects" at more than 1 wt% of a pigment in the primer, thereby supporting the allegation.

(C) Applicants note that Panush, Dattilo, and Jackson, whether taken individually or in combination, fail to teach or suggest a method "wherein a hiding power of the color base paint coating is 30 microns or more" as recited in claim 1.

The Examiner respectfully disagrees with this argument for the reasons discussed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy, Ph.D.
Primary Examiner
Art Unit 1762

February 11, 2008

/Elena Tsoy /

Primary Examiner, Art Unit 1792